

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A data frame distribution method wherein either one of at least two information processing apparatus interconnected by at least two communication lines distributes and transmits a data frame ~~frames~~ to either one of across said at least the two communication lines to effect transmission of the data frames from the one information processing apparatus to the other information processing apparatus, the method comprising the steps of:

storing ~~an amount~~ for each communication line of said at least two communication lines a count of the number of data frames transmitted to said at least the two communication lines ~~lines for each of at least the two communication lines~~;

generating a data frame to be transmitted;

comparing the stored ~~amounts~~ counts of the number of data frames for said at least two communication lines with each other;

selecting a communication line from said at least two communication lines having the smallest stored ~~amount~~ count of the number of data frames; and

transmitting the generated data frame to the selected communication line.

2. (currently amended) A data frame distribution method according to claim 1, wherein said count is an indication of ~~storing step stores a cumulative value~~

of the number of bytes of data frames transmitted to each of at least the two said communication linelines, as the amount of data frames.

3. (currently amended) A data frame distribution method according to claim 1, wherein said ~~storing step stores~~ count is an indication of a cumulative value of the number of data frames transmitted to each of at least the two said communication linelines, as the amount of data frames.

4. (currently amended) A data frame distribution method according to claim 1, wherein said transmitting step further includes a step of adding a count ~~an~~ amount of the generated data frame to the amount count of data frames stored for the selected communication line.

5. (currently amended) A data frame distribution method wherein either one of at least two information processing apparatus interconnected by at least two communication lines distributes and transmits a data ~~frame~~ frames to either one of across said at least the two communication lines to effect transmission of the data frames from the one information processing apparatus to the other information processing apparatus, the method comprising the steps of:

storing for each communication line of said at least two communication lines a count of the number ~~an amount~~ of data frames transmitted to said at least the two communication linelines for each of at least the two communication lines;

storing line information of either one of at least the two communication lines;

generating a data frame to be transmitted;

adding a count ~~an amount~~ of the generated data frame to the count ~~amount~~ of data frames stored for the communication line corresponding to the stored line information, ~~and storing an addition result~~; and

transmitting the generated data frame to the communication line corresponding to the stored line information.

6. (currently amended) A data frame distribution method according to claim 5, wherein said transmitting step further includes the steps of:

comparing the ~~amounts~~ counts of the number of data frames stored for each of said at least the two communication lines with each other;

selecting a communication line having the smallest stored ~~amount~~ count of data frames; and

storing line information corresponding to the selected communication line.

7. (currently amended) A data frame distribution method according to claim 5, wherein said step of storing the ~~amount~~ counts of the number of data frames for each of at least the two communication lines stores a cumulative value of the number of bytes of transmitted data frames, ~~as the amount of data frames~~.

8. (currently amended) A data frame transmission/reception method wherein between at least two information processing apparatus interconnected by at least two communication lines, a data frame ~~is~~ are transmitted/received to/from at

least the two communication lines in a distributed manner, the method comprising the steps of:

in a transmission side data processing apparatus;
storing ~~an amount~~for each communication line of said at least two
communication lines a count of the number of data frames transmitted to at least the
~~two~~said communication line~~lines for each of at least the two communication lines;~~
generating a data frame to be transmitted;
comparing the stored ~~amounts~~counts of the number of data frames for said at
least two communication lines with each other;
selecting a communication line from said at least two communication lines
having the smallest stored ~~amount~~count of the number of data frames; and
distributing and transmitting the generated data frame to the selected
communication line; and
in a reception side data processing apparatus;
receiving the data frame transmitted from the transmission side data
processing apparatus.

9. (currently amended) A data frame transmission/reception method according to claim 8, further comprising the steps of:

in the transmission side data processing apparatus;
counting the number of data frames transmitted at least the two
communication lines; and
inserting the counted value in the generated data frame as order information.

10. (original) A data frame transmission/reception method according to claim 9, wherein said inserting step further counts up the counted value and inserts the count-up count in the data frame as the order information.

11. (original) A data frame transmission/reception method according to claim 9, wherein said counting step counts the number of bytes of data frames transmitted to at least the two communication lines.

12. (currently amended) A data frame transmission/reception method according to claim 9, further comprising the steps of:

- | in the reception side data processing apparatus;
- | counting the number of data frames received from at least the two
- | communication lines and processed;
- | comparing the order information inserted into the received data frame with the
- | counted value; and
- | if the order information is coincident with the counted value, executing

processing of the received data frame.

13. (original) A data frame transmission/reception method according to claim 12, wherein if the order information is not coincident with the counted value, said comparing step compares the order information inserted into another data frame

received from either one of at least the two communication lines with the counted value.

14. (original) A data frame transmission/reception method according to claim 13, wherein if the order information inserted into all received data frames is not coincident with the counted value, said comparing step suspends processing until another data frame is received from either one of at least the two communication lines.

15. (original) A data frame transmission/reception method according to claim 12, wherein said counting step counts up the counted value after execution of processing the received data frame.

16. (original) A data frame transmission/reception method according to claim 12, wherein said step of executing processing of the received data frame includes a step of deleting the order information inserted into the received data frame.

17. (currently amended) A data frame reception method of receiving a data ~~frame-frames~~ transmitted from ~~either one of~~ at least two information processing ~~apparatus-apparatuses~~ interconnected by at least two communication lines, via either one of at least the two communication lines to effect transmission of the data

frames from the one information processing apparatus to the other information processing apparatus, the method comprising the steps of:

counting the number of data frames received from said ~~either one of~~ at least the two communication lines ~~and processed~~, and storing the counted value;

receiving a data frame transmitted from either one of at least the two communication lines;

comparing order information inserted into the received data frame with the counted value; and

if the order information is coincident with the counted value, executing processing of the received data frame.

18. (original) A data frame reception method according to claim 17, wherein if the order information is not coincident with the counted value, said comparing step compares the order information inserted into another data frame received from either one of at least the two communication lines with the counted value.

19. (original) A data frame reception method according to claim 17, wherein if the order information inserted into all received data frames is not coincident with the counted value, said comparing step suspends processing until another data frame is received from either one of at least the two communication lines.

20. (original) A data frame reception method according to claim 17, wherein said counting step counts up the counted value after execution of processing the received data frame.

21. (currently amended) A data frame reception method of receiving a data ~~frame~~frames transmitted from either one of at least two information processing ~~apparatus~~apparatuses interconnected by at least two communication lines, via either one of at least the two communication lines, the method comprising the steps of:

storing line information corresponding to either one of at least the two communication lines, among information inserted into a data frame received from either one of at least the two communication lines and processed;

receiving a data frame from either one of at least the two communication lines;

judging whether the data frame was received from the communication line corresponding to the stored line information; and

if the data frame is received from the communication line corresponding to the stored line information, executing processing of the received data frame.

22. (original) A data frame reception method according to claim 21, wherein if the data frame was not received from the communication line corresponding to the stored line information, said judging step suspends processing

until a data frame is received from the communication line corresponding to the stored line information.

23. (original) A data frame reception method according to claim 21, wherein said step of executing processing of the receiving data frame stored line information inserted into the received data frame.

24. (new) A data frame distribution method, wherein one of at least two information processing apparatus interconnected by at least two communication lines distributes and transmits data frames across said at least the two communication lines to effect the transmission of the data frames from the one information processing apparatus to the other information processing apparatus, the method comprising the steps of:

storing for each communication line of said at least two communication lines a count of the number of data frames transmitted to said communication line;

generating a data from to be transmitted;

comparing the stored counts of the number of data frames for said at least two communication lines with each other;

selecting a communication line from said at least two communication lines having the smallest stored count of the number of data frames;

inserting order information into the generated data frame; and

transmitting the data frame to which the order information to the selected communication line.

25. (new) A data frame distribution method according to claim 24, wherein the step of inserting is further insert next transmission line number to the data frame.

26. (new) A data frame transmission/reception method, wherein between at least two information processing apparatus interconnected by at least two communication lines, data frames are transmitted/received to/from at least the two communication lines in a distributed manner, the method comprising the steps of:

in a transmission side data processing apparatus:

storing for each communication line of said at least two communication lines a count of the number of data frames transmitted to said communication line,

generating a data frame to be transmitted;

comprising the stored counts of the number of data frames for said at least two communication lines with each other,

selecting a communication line from said at least two communication lines having the smallest count of the number of data frames,

inserting order information to the generated data frame, and

transmitting the data frame to which the order information is inserted to the selected communication line; and

in a reception side data processing apparatus:

receiving the data frame transmitted from the transmission side data processing apparatus.

27. (new) A data frame distribution method according to claim 26, wherein the step for inserting is further insert next transmitting line number to the data frame.